

(iv) The billet must strike the specimen so as to produce an impact equivalent to that resulting from a free vertical drop of 1.4 kg (3 pounds) through 1 m (3.3 feet).

(v) The flat face of the billet must be 2.5 cm (1 inch) in diameter with the edges rounded off to a radius of 3 mm ± 0.3 mm (.12 inch ± 0.012 inch).

(4) *Heat test.* The specimen must be heated in air to a temperature of not less than 800 °C (1475 °F), held at that temperature for a period of 10 minutes, and then allowed to cool.

(c) *Leaching assessment methods.* (1) For indispersible solid material—

(i) The specimen shall be immersed for seven days in water at ambient temperature. The volume of water to be used in the test shall be sufficient to ensure that at the end of the seven day test period the free volume of the unabsorbed and unreacted water remaining shall be at least 10% of the volume of the solid test sample itself. The water shall have an initial pH of 6–8 and a maximum conductivity of 1 mS/m (10 micromho/cm) at 20 °C (68 °F).

(ii) The water with specimen must then be heated to a temperature of 50 °C $\pm 5^\circ$ (122 °F $\pm 9^\circ$) and maintained at this temperature for four hours.

(iii) The activity of the water must then be determined.

(iv) The specimen shall then be kept for at least seven days in still air at not less than 30 °C (86 °F) and relative humidity not less than 90%.

(v) The specimen must then be immersed in water under the same conditions as in paragraph (c)(1)(i) of this section, and the water with specimen must be heated to 50 °C $\pm 5^\circ$ (122 °F $\pm 9^\circ$) and maintained at that temperature for four hours.

(vi) The activity of the water must then be determined. The activities determined in paragraph (c)(1)(iii) of this section and this paragraph, (c)(1)(vi), may not exceed 2 kilobecquerels (0.05 microcurie).

(2) For encapsulated material—

(i) The specimen shall be immersed in water at ambient temperature. The water shall have an initial pH of 6–8 and a maximum conductivity of 1 mS/m (10 micromho/cm) at 20 °C (68 °F).

(ii) The water and specimen must be heated to a temperature of 50 °C $\pm 5^\circ$ (122

°F $\pm 9^\circ$) and maintained at this temperature for four hours.

(iii) The activity of the water must then be determined.

(iv) The specimen shall then be kept for at least seven days in still air at not less than 30 °C (86 °F) and relative humidity not less than 90%.

(v) The process in paragraphs (c)(2)(i), (c)(2)(ii), and (c)(2)(iii) of this section must be repeated.

(vi) The activity determined in paragraph (c)(2)(iii) of this section may not exceed 2 kilobecquerels (0.05 microcurie).

(d) A specimen that comprises or simulates Class 7 (radioactive) material contained in a sealed capsule need not be subjected to—

(1) The impact test and the percussion test of this section provided that the mass of the special form radioactive material is less than 200 g and it is alternatively subjected to the Class 4 impact test prescribed in ISO 2919, “Sealed Radioactive Sources—Classification” (IBR, see §171.7 of this subchapter); and

(2) The heat test of this section, provided the specimen is alternatively subjected to the Class 6 temperature test specified in the International Organization for Standardization document ISO 2919-1980(e), “Sealed Radioactive Sources—Classification.” (see §171.7 of this subchapter)

[Amdt. 173–244, 60 FR 50307, Sept. 28, 1995, as amended at 63 FR 37461, July 10, 1998; 64 FR 51919, Sept. 27, 1999; 66 FR 45184, 45380, 45381, Aug. 28, 2001; 68 FR 75742, 75747, Dec. 31, 2003; 69 FR 3692, Jan. 26, 2004]

§ 173.471 Requirements for U.S. Nuclear Regulatory Commission approved packages.

In addition to the applicable requirements of the U.S. Nuclear Regulatory Commission (NRC) and other requirements of this subchapter, any offeror of a Type B(U), Type B(M), or fissile material package that has been approved by the NRC in accordance with 10 CFR part 71 must also comply with the following requirements:

(a) The offeror shall be registered with the USNRC as a party to the packaging approval, and make the shipment in compliance with the terms of the packaging approval;

(b) The outside of each package must be durably and legibly marked with the package identification marking indicated in the USNRC packaging approval;

(c) Each shipping paper related to the shipment of the package must bear the package identification marking indicated in the USNRC packaging approval;

(d) Before export shipment of the package, the offeror shall obtain a U.S. Competent Authority Certificate for that package design, or if one has already been issued, the offeror shall register in writing (including a description of the quality assurance program required by 10 CFR part 71) with the U.S. Competent Authority as a user of the certificate. (NOTE: The person who originally applies for a U.S. Competent Authority Certificate will be registered automatically.) The registration request must be sent to the Associate Administrator for Hazardous Materials Safety (PHH-23), Department of Transportation, East Building, 1200 New Jersey Avenue, SE., Washington DC 20590-0001. Alternatively, the application with any attached supporting documentation in an appropriate format may be submitted by facsimile (fax) to (202) 366-3753 or (202) 366-3650, or by electronic mail (e-mail) to "ramcert@dot.gov." Upon registration, the offeror will be furnished with a copy of the certificate. The offeror shall then submit a copy of the U.S. Competent Authority Certificate applying to that package design to the national competent authority of each country into or through which the package will be transported, unless the offeror has documentary evidence that a copy has already been furnished; and

(e) Each request for a U.S. Competent Authority Certificate as required by the IAEA regulations must be submitted in writing to the Associate Administrator. The request must be in triplicate and include copies of the applicable USNRC packaging approval, USNRC Quality Assurance Program approval number, and a reproducible 22 cm x 30 cm (8.5" x 11") drawing showing the make-up of the package. The request and accompanying documentation must be sent to the Associate Administrator for Hazardous Materials

Safety (PHH-23), Department of Transportation, East Building, 1200 New Jersey Avenue, SE., Washington DC 20590-0001. Alternatively, the application with any attached supporting documentation in an appropriate format may be submitted by facsimile (fax) to (202) 366-3753 or (202) 366-3650, or by electronic mail (e-mail) to "ramcert@dot.gov." Each request is considered in the order in which it is received. To allow sufficient time for consideration, requests must be received at least 90 days before the requested effective date.

[Amdt. 173-244, 60 FR 50307, Sept. 28, 1995, as amended at 66 FR 45379, Aug. 28, 2001; 67 FR 61014, Sept. 27, 2002; 69 FR 3693, Jan. 26, 2004; 70 FR 56099, Sept. 23, 2005; 72 FR 55693, Oct. 1, 2007]

§ 173.472 Requirements for exporting DOT Specification Type B and fissile packages.

(a) Any offeror who exports a DOT Specification Type B or fissile material package authorized by § 173.416 or § 173.417 shall comply with paragraphs (b) through (f) of this section.

(b) The shipment must be made in accordance with the conditions of the U.S. Certificate of Competent Authority.

(c) The outside of each package must be durably and legibly marked with the package identification marking indicated in the U.S. Competent Authority Certificate.

(d) Each shipping paper related to the shipment of the package must bear the package identification marking indicated in the U.S. Competent Authority Certificate.

(e) Before export of the package, the offeror shall obtain a U.S. Competent Authority Certificate for that package design, or if one has already been issued, the offeror shall register in writing (including a description of the quality assurance program required by 10 CFR part 71, subpart H, or 49 CFR 173.474 and 173.475) with the U.S. Competent Authority as a user of the certificate. Upon registration, the offeror will be furnished with a copy of the certificate. The offeror shall then submit a copy of the U.S. Competent Authority Certificate applying to that